

REMARKS

Upon entry of this amendment, independent claim 1 with dependent claims 3 and 4 and independent claim 5 with dependent claim 8 will be present in the application.

Claim 1 has been amended to more clearly recite that the horizontal reel rests on the reel drum in the horizontal position. Claim 1 has also been amended to recite that the value of the pressure force in the nip is measured directly with a load sensing device disposed below the core shaft and to recite that the pressure force in the nip is controlled at the desired level using only the measured value of the pressure force. Such operation is disclosed on page 5, lines 6-15, and page 5, line 28, to page 6, line 8, of the specification. Claim 5 has been amended to recite that the horizontal reel and the pulp sheet wound on the horizontal reel are biased toward the reel drum by the hydraulic cylinder and integral load sensing device as the horizontal reel is swivelled by the primary arm from a substantially vertical position above the reel drum to a substantially horizontal position and resting on the reel drum. Such apparatus has been recited in claim 1. Accordingly, the amendments do not introduce any new matter.

Claims 1 and 3-4 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, the Office Action alleging that "the axis" in line 5 of claim 1 lacked proper antecedent basis. Claim 1 has been amended to recite "swivelling the primary arm around an axis of the reel drum. Accordingly, the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

Claims 1 and 3-5 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. 5,611,500 (Smith). Claim 1 has been amended to recite that the pressure force in the nip is controlled at the desired level using only the measured value of the pressure force. Smith teaches that "[t]he reaction force on the drum 15 is measured by the load cell 32, 32a, ... The web tension force measured by the load cell 39 is subtracted from the force on the load cell 32, 32a to provide a net reading of nip force N. The combination of signals are fed to the central processor 35 which produces a control pneumatic/hydraulic signal by the current/pressure device 36 so that the pneumatic or hydraulic cylinders apply the proper control force to obtain a desired, preprogrammed nip pressure." (Col. 7, lines 13-

22) Although it isn't clear whether "the combination of signals" that are used to control the nip pressure includes the signal from load cell 41 or just the "net reading of nip force N", it is clear that more than one load signal is used to control the nip force. Therefore, the Smith reference does not disclose "controlling the pressure force in the nip at a desired level, using only the measured value of the pressure force", as recited in claim 1. In addition, the Smith reference does not disclose that the value of the pressure force be measured directly with a load sensing device disposed below the core shaft, as recited in claim 1. Further, Smith does not disclose a horizontal reel and a pulp sheet wound on the horizontal reel that are biased toward the reel drum by the hydraulic cylinder and integral load sensing device as the horizontal reel is swivelled by the primary arm from a substantially vertical position above the reel drum to a substantially horizontal position and resting on the reel drum, as recited in claim 5. Accordingly, the rejection under 35 U.S.C. § 102 should be withdrawn.

Claim 8 was rejected under 35 U.S.C. § 103 as being unpatentable over U.S. 6,036,137 (Myren), the Office Action contending that Myren discloses "a horizontal reel (26) being supported on a load sensing device (44, etc.) of the horizontally adjustable holding device (37, 38, etc), as shown in figures 2 and 3." However, devices 42 and 44 of the Myren apparatus are not load sensing devices as alleged by the Office Action. In fact, the Myren apparatus does not use load sensing devices. As taught by Myren (Col 6, line 24, to Col. 7, line 19),


The winding of paper onto the reel spool 26 in the winding position is conducted with the reel spool 26 held in a pair of *secondary arms 42 and 44* movably mounted on each of two secondary carriages 37 (only one visible in FIG. 1) on opposite ends of the reel spool 26. The carriages 37 are horizontally slidable along a system of rails 40 so that the carriages can be moved toward and away from the reel drum 19. A hydraulic actuator 38 is connected to each of the carriages 37 for imparting horizontal movement to the carriage 37 ... The carriage [37] pivotally supports a pair of arms 42 and 44. ... In order to control the indentation of the paper roll 25 and nip load during the winding process, *the apparatus includes sensors for sensing the radial indentation of the paper roll at the nip* and signals from the sensors are used for controlling the movement of the carriage so as to control the indentation and nip load. Thus, a *first sensor 70 is suitably mounted, for example to a ceiling C of a building housing the apparatus*, for sensing the unindented radial thickness ... of the parent roll 25 in an unindented region of the roll spaced from the nip 72. ... A second sensor 74 is suitably

mounted for sensing the indented radial thickness ... of the parent roll 25 at the nip 72. ... the sensor 74 may sense the distance between the centers of the reel drum 19 and reel spool 26, or the distance between the center of one and the surface of the other, etc., any of which can be used to derive the indented radial thickness ... Alternatively, *a position sensor can be built into or otherwise connected to the hydraulic actuator 38 that moves the carriage 37, and the position of the carriage indicated by such sensor can be used for inferring the indented radial thickness*

MPEP § 706.02(j) states “[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. ... the prior art reference (or references when combined) must teach or suggest all the claim limitations.” See also MPEP §§ 2142 and 2143. The Office Action does not cite any other reference as disclosing the “secondary arm including a horizontally adjustable holding device having a load sensing device, the horizontal reel being supported on the load-sensing device of the horizontally adjustable holding device” recited in claim 8. Therefore, such Office Action does not establish a *prima facie* case of obviousness with respect to claim 8.

In view of the above-directed amendments and the proceeding remarks, prompt and favorable reconsideration is respectfully requested.

Respectfully submitted,
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